Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	28	("4817043" "4974170" "5237157" "5649186" "5764226" "5765142" "5826267" "5983227" "6014137" "6029182" "6424979" "6460040" "6587668" "6766362").pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:20
L2	0	1 and (seed near2 data)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:20
L3	0	1 and seed and data	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:20
L4	0	1 and seed	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:21
L5	15	1 and database	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:21
L6	0	5 and metadata	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:21
L7	4	5 and appearance	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:29
L8	2	7 and web	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:22
L9	2	8 and (creat$3 or generat$3 or build$4)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/11/10 09:28

US006460040B1

(12) **United States Patent**
Burns

(10) **Patent No.: US 6,460,040 B1**
(45) **Date of Patent: *Oct. 1, 2002**

(54) **AUTHORING SYSTEM FOR COMPUTED-BASED INFORMATION DELIVERY SYSTEM**

(75) Inventor: **Kevin S. Burns**, Bellevue, WA (US)

(73) Assignee: **Datamize LLC**, Florence, MT (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/478,577**

(22) Filed: **Jan. 6, 2000**

Related U.S. Application Data

(63) Continuation of application No. 08/810,949, filed on Feb. 27, 1997, now Pat. No. 6,014,137.
(60) Provisional application No. 60/012,341, filed on Feb. 27, 1996.

(51) **Int. Cl.**[7] **G06F 17/30**
(52) **U.S. Cl.** **707/10**; 345/334
(58) **Field of Search** 707/508, 51, 1–3, 707/10, 10.51; 705/26–27, 1, 14, 40; 709/218–219; 348/552, 14.01; 345/747

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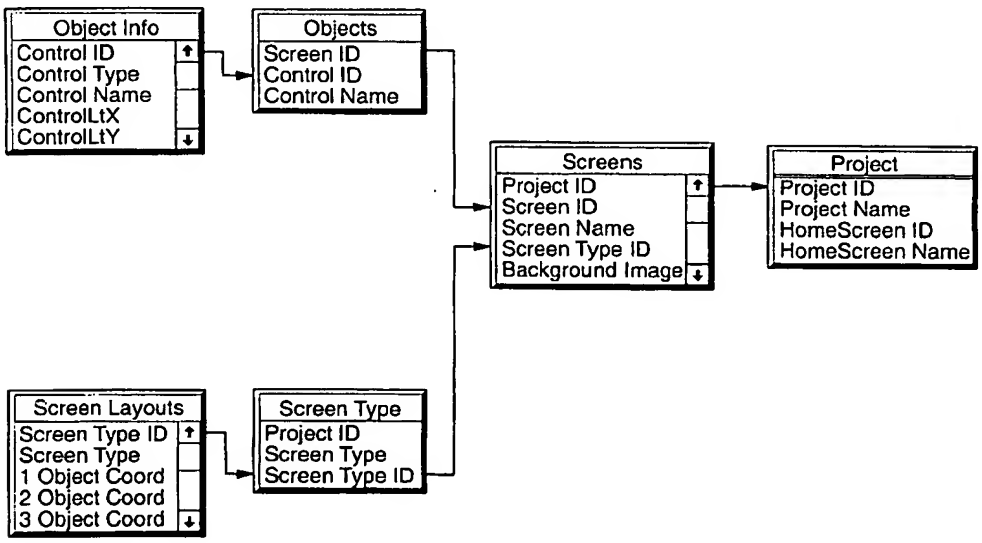
Primary Examiner—John Breene
Assistant Examiner—Mohammad Ali
(74) *Attorney, Agent, or Firm*—Elliot B. Aronson

(57) **ABSTRACT**

A multimedia kiosk authoring system for use in developing and maintaining user interface screens for multimedia kiosk systems. The authoring system enables the user interface for each individual kiosk to be customized quickly and easily within wide limits of variation, yet subject to constraints adhering the resulting interface to good standards of aesthetics and user friendliness. The system may be used to provide custom interfaces expeditiously even for hundreds of kiosks presenting information from numerous independent information sources. The authoring system uses the methods of object oriented programming to define specialized object classes for instantiation on individual kiosk interface screens subject to pre-defined limitations on variability. Links are provided to an appropriate database for multimedia presentations on an interface screen of content bearing information from the information providers.

38 Claims, 6 Drawing Sheets



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US005983227A

United States Patent [19]

Nazem et al.

[11] Patent Number: 5,983,227

[45] Date of Patent: Nov. 9, 1999

[54] DYNAMIC PAGE GENERATOR

[75] Inventors: **Farzad Nazem**, Redwood City; **Ashvinkumar P Patel**, Milpitas, both of Calif.

[73] Assignee: **Yahoo, Inc.**, Santa Clara, Calif.

[21] Appl. No.: **08/873,975**

[22] Filed: **Jun. 12, 1997**

[51] **Int. Cl.**[6] **G06F 17/30**

[52] **U.S. Cl.** **707/10**; 707/104; 707/500; 707/513; 707/517; 395/200.47; 705/1; 705/10

[58] **Field of Search** 707/10, 104, 200, 707/500, 513, 517; 395/200.47, 200.48, 200.49; 705/1, 10

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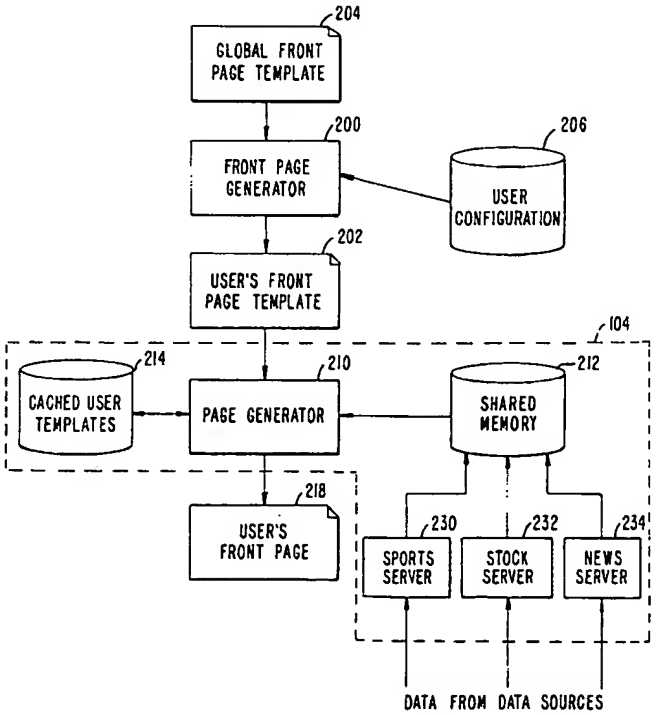
Primary Examiner—Paul R. Lintz

Attorney, Agent, or Firm—Philip H. Albert; Townsend and Townsend and Crew LLP

[57] **ABSTRACT**

An custom page server is provided with user preferences organized into templates stored in compact data structures and the live data used to fill the templates stored local to the page server which is handing user requests for custom pages. One process is executed on the page server for every request. The process is provided a user template for the user making the request, where the user template is either generated from user preferences or retrieved from a cache of recently used user templates. Each user process is provided access to a large region of shared memory which contains all of the live data needed to fill any user template. Typically, the pages served are news pages, giving the user a custom selection of stock quotes, news headlines, sports scores, weather, and the like. With the live data stored in a local, shared memory, any custom page can be built within the page server, eliminating the need to make requests from other servers for portions of the live data. While the shared memory might include RAM (random access memory) and disk storage, in many computer systems, it is faster to store all the live data in RAM.

9 Claims, 7 Drawing Sheets



DERWENT-ACC-NO: 2000-126098

DERWENT-WEEK: 200514

TITLE: Window display selection procedure for multimedia electronic kiosk authoring system in airports, public transportation stations, museums and exhibition

INVENTOR: BURNS, K S

PATENT-ASSIGNEE: MULTIMEDIA ADVENTURES [MULTN]

PRIORITY-DATA: 1996US-012341P (February 27, 1996) , 1997US-0810949 (February 27, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6014137 A	January 11, 2000	N/A	018	G06F 015/21

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
US 6014137A	Provisional	1996US-012341P	February 27, 1996
US 6014137A	N/A	1997US-0810949	February 27, 1997

INT-CL (IPC): G06F015/21

RELATED-ACC-NO: 2003-127787, 2003-557318 , 2003-644727 , 2003-658581 , 2004-155870 , 2005-131426

ABSTRACTED-PUB-NO: US 6014137A

BASIC-ABSTRACT:

NOVELTY - The elements to be included in a custom interface screen under construction having one button type, are selected from the predefined elements.
Values are assigned to attributes of selected elements consistent

with
predefined constraints. The aggregate layout of the selected elements is
aesthetically pleasing and functionally operable for effective delivery of
information to a kiosk user.

DETAILED DESCRIPTION - The information providers includes master **database**
storing information to be displayed on any one of kiosks. The predefined
interface screen element are input which define form of element available for
presentation on the custom interface screen. The element permits limited
variation in its on-screen characteristics in conformity with desired uniform
and aesthetically pleasing **appearance** for interface screens on all kiosks. The
predefined element include one predefined window type, predefined button type
and predefined multimedia type. One master **database** is selected to define
kiosk information for individual kiosk. The information is associated with
selected elements for interface screen under construction. The selected button
type element is associated to an action facilitating the viewing of at least
portions of kiosk information content by a kiosk user.

USE - For multimedia kiosk authoring system used for displaying initial
stylistic presentation of ski shop, graphic image of skier executing exciting
ski maneuver, for presenting video clip, audio clip, for displaying graphic
image in restaurant, image of stylish menu, for displaying information about
tennis, golf, and other outdoor activities in summer. Also used in museums and
exhibitions, airports, public transportation stations, banks and in retail
establishments.

ADVANTAGE - Avoids need to keep track of different versions in the field. The
system can be used by persons with little or no experience in the intricate
details of computer programming, thereby making it easier for large

number of
persons to set up kiosk interface screen. Individual can devise a kiosk
interface screen, using authorizing software and it is the only choice for
stylist and functional elements appearing in the screen displays. Thus, button
styles and sizes, window borders, color combination, and type of fonts and
hierarchical methods of retrieving information may be built into the system.
When **database** tables are modified, the modified content is downloaded to each
kiosk in the system. Uncontrolled propagation of multiple version throughout
the kiosks in the field is prevented. The need for keeping track of which
version each kiosk has, is avoided and it is easier to keep comply with
contractual obligation to keep each subscriber updated with the latest version.
The kiosk can be moved from one subscriber to another without change of
software or reconfiguration and avoids loading and unloading of information
files. Broadcasts messages to any concern, easily. The local layout for a
particular kiosk subscriber can be configured either at the subscriber's
location or remotely.

DESCRIPTION OF DRAWING(S) - The figure shows kiosk screen display layout.

CHOSEN-DRAWING: Dwg.2A/5

TITLE-TERMS: WINDOW DISPLAY SELECT PROCEDURE ELECTRONIC KIOSK SYSTEM AIRPORT
PUBLIC TRANSPORT STATION MUSEUM EXHIBIT

DERWENT-CLASS: T01 T05

EPI-CODES: T01-J05B4F; T01-J12B; T01-J30; T05-H08C;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N2000-095050